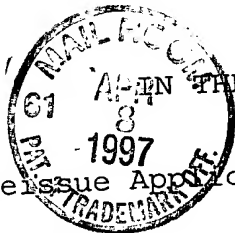


PATENT
15275/8610 (Dobbins 2-1)



THE UNITED STATES PATENT AND TRADEMARK OFFICE

Reissue Application No.:

Filed:

U.S. Patent No.:

5,043,002

Granted:

August 27, 1991

Patentees:

Michael S. Dobbins

Robert E. McLay

For: METHOD OF MAKING FUSED SILICA BY
DECOMPOSING SILOXANES

COMBINED DECLARATION AND POWER OF ATTORNEY

Assistant Commissioner for Patents
Washington, D.C. 20231

Dear Sir:

Applicants, Michael S. Dobbins and Robert E. McLay
declare that:

We have reviewed and understand the contents of the
specification, including the claims, of the attached reissue
application.

We believe ourselves to be the original, first, and
joint inventors of the subject matter described and claimed in
our original Letters Patent No. 5,043,002, entitled METHOD OF
MAKING FUSED SILICA BY DECOMPOSING SILOXANES, issued August 27,
1991, based on U.S. Patent Application Serial No. 568,230, filed
August 16, 1990, and in the attached specification, for which
invention we solicit a reissue patent. As to the claimed subject
matter of this application, we do not know and do not believe
that this subject matter was ever known or used in the United

States prior to our invention or discovery thereof. We have the following citizenship, residences, and post office addresses:

1-00 201	FULL NAME OF INVENTOR	FAMILY NAME <u>Dobbins</u>	FIRST GIVEN NAME <u>Michael</u>	MIDDLE INITIAL <u>S.</u>
	RESIDENCE & CITIZENSHIP	CITY <u>St. Petersburg</u>	STATE OR FOREIGN COUNTRY <u>Russia</u>	COUNTRY OF CITIZENSHIP <u>USA</u>
	POST OFFICE ADDRESS	POST OFFICE ADDRESS <u>197341 St. Petersburg, Russia (Kolomagi) Third Line, Second Half Dom 19, Korpus 1</u>	CITY <u>St. Petersburg</u>	STATE & ZIP CODE/COUNTRY <u>Russia</u>
C-00 202	FULL NAME OF INVENTOR	FAMILY NAME <u>McLay</u>	FIRST GIVEN NAME <u>Robert</u>	MIDDLE INITIAL <u>E.</u>
	RESIDENCE & CITIZENSHIP	CITY <u>Corning</u>	STATE OR FOREIGN COUNTRY <u>New York</u>	COUNTRY OF CITIZENSHIP <u>USA</u>
	POST OFFICE ADDRESS	POST OFFICE ADDRESS <u>38 Roosevelt Street</u>	CITY <u>Corning</u>	STATE & ZIP CODE/COUNTRY <u>New York 14830 USA</u>

We verily believe that issued U.S. Patent No. 5,043,002 is partly invalid by reason of our claiming more than we had a right to claim. More particularly, claims 1-2 and 23-24 of U.S. Patent No. 5,043,002, as issued, are believed to be invalid, because they read on Japanese Kokai Patent Application No. Hei 1[1989]-138145 to Kawaguchi ("Kawaguchi"). Kawaguchi is believed to anticipate claims 1-2 and 23-24, because those claims permit the claimed silicon-containing compound in vapor form to be a polymethylsiloxane (claims 1 and 23) or hexamethyldisiloxane (claims 2 and 24). Further, claim 12 is indefinite, because it

refers to Group VB metals when, in fact, it should have referred to Group VA metals. See, for example, claims 7, 17, and 22. Finally, claims 13 and 21 are indefinite by reason of the need for the following changes: In column 10, line 15, after "(e)", delete "and" and in column 11, line 2, change "compounding" to -- compound in--.

Further, we verily believe that our issued U.S. Patent No. 5,043,002 is partly inoperative by reason of a defective specification. More particularly, the following passage in U.S. Patent No. 5,043,002 should be modified: In column 3, line 20, change "mos" to --most--.

The present reissue application obviates the above-noted invalidity of issued claims 1-2 and 23-24 by amending them so that the claimed silicon-containing compound in vapor form is polymethylcyclsiloxane. In addition, claims 27 and 30 are added to depend from claims 23 and 1, respectively, to specify that the polymethylcyclsiloxane is octamethylcyclotetrasiloxane. Claims 28 and 31 are added to depend from claims 27 and 30, respectively, to specify that the octamethylcyclotetrasiloxane increases deposition efficiency over that achieved when silicon tetrachloride is utilized as the silicon-containing compound in vapor form. Further claims 29 and 32 are added to depend from claims 28 and 31, respectively, to specify that the deposition increase is about 20%. The errors in claims 12, 13, and 21 and column 3 of the specification have been corrected by the above-noted modifications.

We acknowledge our duty to disclose information of which we are aware which is material to the examination of this application.

The above-noted errors occurred without deceptive intention on our part. We were not aware of Kawaguchi prior to or during prosecution of the original application corresponding to U.S. Patent No. 5,043,002. The relevance of Kawaguchi to U.S.

Patent No. 5,043,002 was first discovered in the Summer of 1995, when assignee Corning Incorporated's Patent Department was conducting a patent analysis of competitors in Japan. Subsequently, Corning Incorporated's attorneys evaluated the claims of U.S. Patent No. 5,043,002 to determine the effect of Kawaguchi on the validity of those claims and how any invalidity problems were to be remedied. As a result, it was decided to file this reissue application with the amendments discussed above. During preparation of this reissue application, the error in claim 12 was discovered.

The errors in column 3 and claims 13 and 21 of U.S. Patent No. 5,043,002 became known to the attorney who prosecuted the case shortly after issuance of that patent and were called to the attention of the U.S. Patent and Trademark Office in the Notice of Error, filed September 16, 1991. However, since these errors were not believed to be of such a nature as would lead to a misunderstanding of the invention or to a misinterpretation of the patent claims, no certificate of correction was sought. In view of the filing of this reissue application on the other grounds noted above, these errors are also now being corrected.

3 We appoint Michael L. Goldman, Registration No. 30,727, Mark W. Lauroesch, Registration No. 35,583, and Edward Murphy, Registration No. 38,251, as our attorneys to prosecute this application and to transact all business in the United States Patent and Trademark Office connected therewith. Send all correspondence to:

Michael L. Goldman
Nixon, Hargrave, Devans & Doyle
P.O. Box 1051
Rochester, New York 14603
(716) 263-1304

The undersigned declare further that all statements made herein of their own knowledge are true and that all statements made on information and belief are believed to be true; and further that the statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code; and that such willful false statements may jeopardize the validity of the application on any patent issuing thereon.

SIGNATURE OF INVENTOR 201 <i>Michael J. Bell</i>	SIGNATURE OF INVENTOR 202 <i>Robert E. McLaughlin</i>
DATE <i>March 21, 1997</i>	DATE <i>March 12, 1997</i>

PATENT
15275/8610 (Dobbins 2-1)

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Reissue Application No.:)
Filed:)
U.S. Patent No.: 5,043,002)
Granted: August 27, 1991)
Patentees: Michael S. Dobbins)
Robert E. McLay)
For: METHOD OF MAKING FUSED SILICA BY)
DECOMPOSING SILOXANES)

67212 U.S. PTO
08/833620
04/07/97

STATEMENT BY ASSIGNEE IN SUPPORT OF REISSUE

Assistant Commissioner for Patents
Washington, D.C. 20231

Dear Sir:

Corning Incorporated, hereinafter designated the Assignee, a corporation organized and existing under the laws of the State of New York, having a principal place of business at 1 Riverfront Plaza, Corning, New York 14831, states that it is the assignee of the entire interest in U.S. Letters Patent No. 5,043,002, issued August 27, 1991, to the inventors Michael S. Dobbins and Robert E. McLay.

The Assignee assents to the accompanying application and prays that the Assignee be allowed to surrender said Letters Patent and that said Letters Patent be reissued to the Assignee in the form indicated in the annexed amended specification. The Assignee offers to surrender the Letters Patent in accordance with 37 CFR § 1.178.

With this statement is filed an order for a title report as required by 37 CFR § 1.171.

CORNING INCORPORATED

By: Alfred L. Michaelson
Alfred L. Michaelson
Senior Vice President and
General Patent Counsel

Date: Mar. 24 1997

TITLE REPORT

PAPER NO.

2

A. APPLICATION FILE DATA

1. SERIAL NO.

833620

2. FILED

4-8-97

3. INVENTOR(S)—FULL NAME(S)

MICHAEL S. DOBBINS
ROBERT E. MCLAY

4. DIVISION OF

5. CONTINUATION OF

6. REISSUE OF

5043002

7. SUBSTITUTE OF

B. ASSIGNMENT RECORD DATA

The assignment records reveal that the Title appears to be vested in:

- ☐ (1.) Inventor(s)
- ☐ (2.) As endorsed
- ☐ (3.) As the record now stands, the patent, when granted, will issue in the name of the inventor(s).
- ☒ (4.) Other CORNING INC.

EXAMINED
UP TO AND INCLUDINGTHIS CERTIFICATE
DATED

8-18-97

BRANCH CHIEF OF ASSIGNMENT SEARCH BRANCH